MECHANISMS OF ULTRASOUND

WHAT IS IT?

Ultrasound is a non invasive modality that produces soundwaves for the purpose of therapeutic response.

WHY?

Ultrasound is gentle, and optimises recovery in an area by enhancing cell activity to promote healing.

HOW DOES IT WORK?

The head of the machine produces sound waves. When the head comes into contact with the skin soundwaves transfer into the body to target the cells in the affected area - it increases cell activity to reduce inflammation and help with healing.

WHAT IS IT FOR?

IWe use it at Swan to reduce inflammation caused by us applying pressure to areas during treatment - this helps patients to feel better after their treatment.

It can be used for Arthritis, Soft Tissue Injuries and much more.

SWAN SERVICES



Students involved with the development Elvis Gobis (Keele) & Lucy Lockwood (Winchester), PEA1 & P1 June 2024

RISKS OF ULTRASOUND





SKIN IRRITATION

Ultrasound gel could potentially create an irritation (redness, heat and/or swelling) more so in individuals with sensitive skin

Inform your therapist if your allergic to the gels used

POTENTIAL INCREASE IN



Symptoms may, temporarily, become exacerbated after ultrasound. **Monitor these and inform your therapist**

THERMAL EFFECTS

If the ultrasound is misused or on a setting which induces thermal ultrasound there is the possibility of localised heating or potential burns. *All our machines are regularly serviced, calibrated and this is extremely RARE.*

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BENEFITS OF ULTRASOUND



REDUCTION IN SWELLING, INFLAMMATION & PAIN

By getting cells to work more efficiently it helps to reduce inflammation in the area which also reduces pain and swelling.

NON INVASIVE

Ultrasound is a non invasive technique.

Meaning it doesn't penetrate the skin (invade the body) so is safe to use in a variety of patients.

AIDS TISSUE REPAIR

The vibrations and how they increase cell membrane activity aids blood circulation and helps the cells to repair to the affected area.



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